

A NEW SPECIES OF WHITEFLY *MIXALEYRODES INDICUS*
SP. NOV. (ALEYRODIDAE: HOMOPTERA) FROM INDIA¹

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(With three text-figures)

Takahashi (1936) erected the genus *Mixaleyrodes*, the type-species being *Mixaleyrodes polystichi* from Taiwan. In 1963 he added one more species namely *M. polypodicola* from Japan

A species of aleyrodid collected from *Litsea travancorica* (Lauraceae) at Idukki, Kerala State during June 1986 by one of the authors (S.S.) has been found to be new and very close to the genus *Mixaleyrodes*. This species does not readily fit into the generic characters of *Mixaleyrodes* due to absence of thoracic and tracheal pores or clefts and folds. However, at present it is assigned to the genus *Mixaleyrodes* Takahashi and as it is distinct from the two known species it is described here as a new species.

***Mixaleyrodes indicus* sp. nov.**

(Figs. 1-3)

Pupal case: Small, elliptic, translucent yellow with wax secretion; 0.50-0.58 mm long, 0.29-0.36 mm wide; found singly on the under-surface of leaf.

Margin: Crenate with 26-29 rounded teeth in 0.1 mm; folded inwards and gives appearance of a submargin; thoracic and caudal pores or clefts absent. Anterior and posterior marginal setae present, 0.02 mm long.

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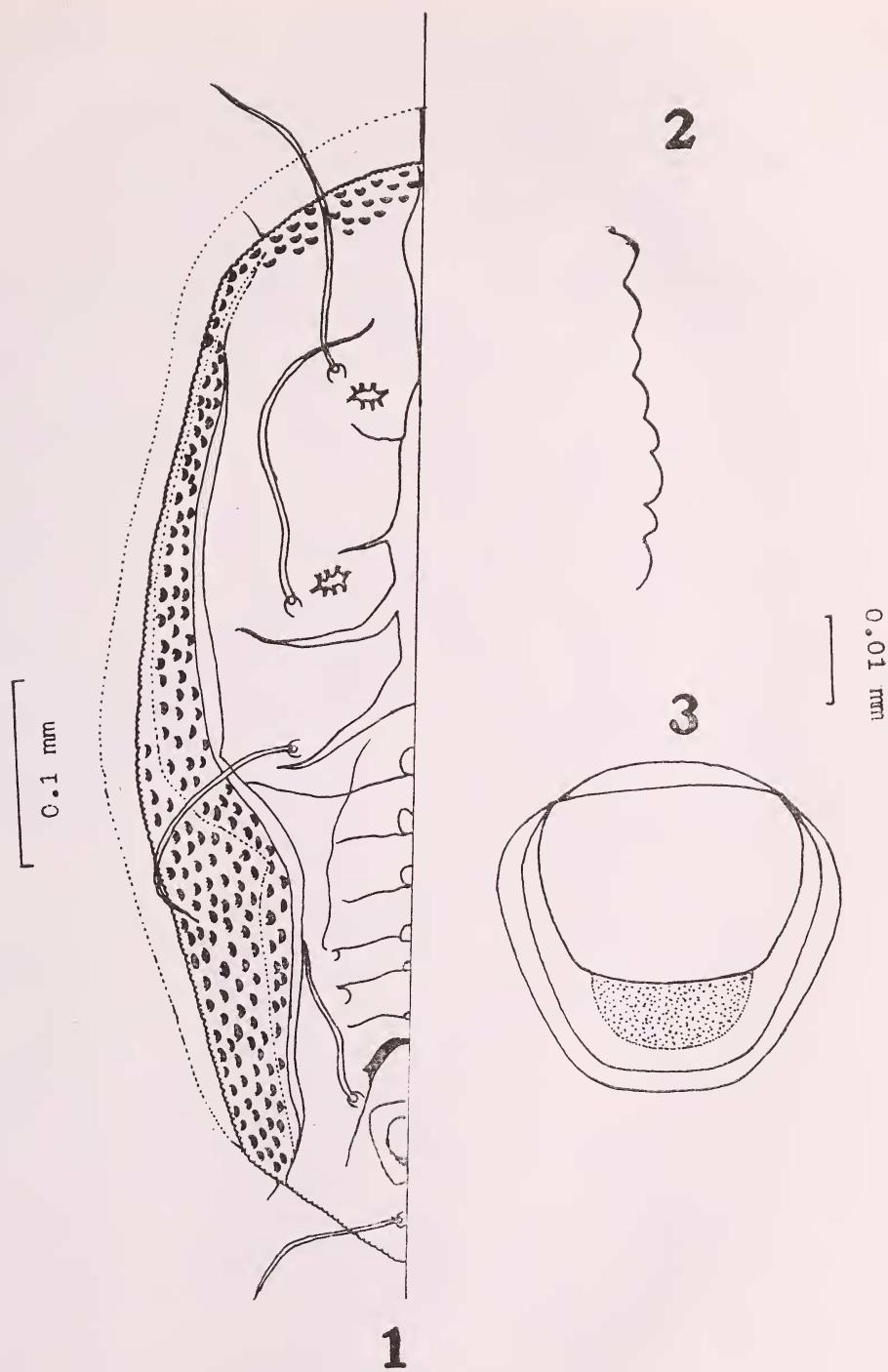
Dorsal surface: Dorsal disc separated from subdorsum by a distinct lateral longitudinal fold. Five pairs of dorsal setae arising on tubercles evident: a pair of cephalic setae 0.12-0.17 mm long, a pair on each of meso- and metathoracic segments 0.11-0.15 mm long, a pair on eighth abdominal segment laterad of vasiform orifice 0.07-0.09 mm long, and a pair of caudal setae arising on submarginal tubercle 0.08-0.10 mm long; setae on prothorax and first abdominal segment absent. Longitudinal moulting suture extends to margin, transverse moulting suture short. A distinct pocket evident at base of cephalic and mesothoracic setae. First six abdominal segments with a distinct tubercle on each. Subdorsum with uniformly distributed tuberculate markings. Seventh abdominal segment shorter than sixth and eighth.

Vasiform orifice: Elevated, roundly cordate with thick lateral walls, measures 0.040-0.045 mm × 0.040-0.042 mm; operculum 0.025 × 0.022 mm, rounded; lingula tip exposed and setose.

Ventral surface: Ventral abdominal setae not discernible; anterior and posterior abdominal spiracles evident; antenna short and does not extend beyond base of foreleg.

Material examined: Holotype. *Litsea travancorica*, Idukki (Kerala State), 13.6.1986, Coll. S. Selvakumaran.

Paratypes: 7 pupal cases on slides bearing same data as of holotype: 3 have been retain-



Figs. 1-3. *Mixaleyrodes indicus* sp. nov.
1. Pupal case; 2. Margin; 3. Vasiform orifice.

ed in the collections of B.V. David and the rest deposited in the collections of the Zoological Survey of India, Calcutta, Division of Entomology, IARI, New Delhi, Systematic Entomology Laboratory, USDA, Washington,

and the British Museum (Natural History), London.

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REFERENCES

TAKAHASHI, R. (1936): Notes on the Aleyrodidae of Japan. (Homoptera) IX. *Kontyu* 10: 150-151.

————— (1963): Some species of Aleyrodidae from Japan (Homoptera). *Kontyu* 31: 49-57